Testimony of

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On the

REAUTHORIZATION

OF THE MARINE MAMMAL PROTECTION ACT OF 1972

On behalf of the

Garden State Seafood Association (GSSA)

Before the

Committee on Resources

Subcommittee on Fisheries, Conservation, Wildlife and Oceans

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Representative Wayne Gilchrest, Chairman

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Mr. Chairman and Members of the House Subcommittee on Fisheries, Conservation, Wildlife and Oceans, on behalf of the members of the Garden State Seafood Association, I thank you for the opportunity to appear before you to discuss the reauthorization of the Marine Mammal Protection Act.

The membership of the Garden State Seafood Association (GSSA) is comprised of shore-based and at-sea commercial fishing interests and fishing-dependent businesses located throughout the State of New Jersey. The various members of the GSSA have a long history of participation, investment, employment, and cooperative scientific data collection and gear mitigation efforts involving numerous mid-Atlantic commercial fisheries, including but not limited to, Atlantic mackerel, long and shortfin squid, Atlantic monkfish, Atlantic scallop, blue crab, summer flounder, scup, black sea bass, American shad, surf clam and ocean quahog, Atlantic menhaden, bluefish, and spiny dogfish.

Traditionally, commercial fishing ports in the State of New Jersey, including Cape May and Point Pleasant among others, are considered major national fishing ports accounting annually for 150 to 200 million pounds of seafood products. GSSA members utilize a vast number of available fishing gears to harvest these marine resources including various gillnet designs, mid-water and bottom trawls, scallop and clam dredges, and crab pots.

Mr. Chairman, New Jersey fishermen and their counterparts from around the country are reporting increasing problems with protected species management issues, chief among them the MMPA. Fishermen continue to forgo fishing time and income in an effort to address these growing problems. Unfortunately, the situation is out of control, and the federal government is placing the needs of mammals far above that of fishing families, and fishermen are now in an untenable position. It is for these reasons that we appear before this Subcommittee. We provide oral comments, submit written testimony for the record with your approval, and ask for your leadership in helping us resolve these difficult issues.

THE MMPA: PROTECTIONISM VERSUS RESOURCE MANAGEMENT

The main objectives of the MMPA are "to protect and encourage marine mammals to develop to the greatest extent feasible commensurate with sound policies of resource management" such that they do not "cease to be a significant functioning element of the ecosystem of which they are a part" and that they do not diminish below their optimum sustainable population (OSP)." U.S.C. 1361(2);(6). In theory, this represents a somewhat balanced approach to wildlife management, making sense both biologically and philosophically.

It is with the federal government's subsequent implementation of the Act that we begin to experience a distinct shift from "sound policies of resource management" toward outright protectionism. It is readily acknowledged that the original law was crafted in an effort to atone for the consequences of "man's impact upon marine mammals [which] has ranged from what might be termed malign neglect to virtual genocide." H.R. Rept. No. 92-707. This philosophical shift comes at the expense of working men and women involved in commercial fishing around the nation.

The 1994 MMPA reauthorization (P.L.103-238) provided, among other things, for the accidental harm of mammals in the normal course of commercial fish harvesting. But the law also requires fishing operations to take steps to reduce interactions with populations that NMFS determines to be in decline via a take reduction team, or the "TRT" approach. Here again, in theory this appears to be a reasonable methodology for purposes of marine mammal management.

In reality however, the MMPA will continue to be perceived as controversial and flawed legislation because it: (A) applies overly extreme levels of precautionary management in the absence of sound scientific information; (B) fails to address the paradox of protecting & managing population increases that inevitably follow complete and total protection; (C) prioritizes the interests of marine mammals disproportionately above that of mankind by failing to balance marine mammal protection measures with socio-economic concerns; and (D) has the unattainable goal of maintaining stocks at OSP at least 95 percent of the time.

PBR: AN EXERCISE IN PRECAUTIONARY MANAGEMENT

The 1994 MMPA reauthorization added a new requirement that NMFS develop estimates of Potential Biological Removal ("PBR"). PBR is the maximum number of animals, not including natural mortalities, which may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population.

PBR is the product of three components: (1) the minimum population estimate (Nmin); half the maximum net productivity rate (0.5 Rmax); and a recovery factor (Fr) and is expressed by the formula:

PBR = Nmin * 1/2 Rmax * Fr

PBR is not based on or derived from any specific wildlife management population model. It was apparently developed by NMFS solely for implementing the 1994 MMPA amendments. NMFS scientists freely incorporated several layers of precautionary assumptions into the only formula that would serve as a nationwide standard for calculating PBR.

The Minimum Population Estimate (Nmin) is defined as the number of animals in a stock, which is supposed to be based on the best available information and provides reasonable assurance that the stock size is equal to or greater than the estimate. However, the Act contains no specific reference to what is "a reasonable assurance" that the population is equal to or greater than that estimate. *This means that NMFS intends for the values to be less than the best estimate.* Indeed, *the best available population survey numbers are adjusted downward as the NMFS deems fit to account for "uncertainty."*

"Rmax" is defined as *one half* of the maximum theoretical or estimated net productivity rate of the stock at a small population size. Net productivity rate is considered to be the annual per capita rate of increase in a stock due to reproduction. In most instances conservative default values are used, 0.04 (cetaceans) and 0.12 (pinnipeds). Hence, not only are conservative values employed as a starting point, but the Rmax *values are reduced again by half to account for possible "uncertainty."*

Finally, a recovery factor termed "Fr" is applied to the PBR calculation. *The intent of the recovery factor is to compensate for uncertainty and possible unknown estimation errors.* Though the 1994 amendments provided no specific guidance for values of Fr, values of 0.1 to 1.0 are arbitrarily used to reduce the value of PBR. The value of Fr used in a given PBR formula may vary, such that Fr = 0.1 for endangered stocks; Fr = 0.50 for stocks of unknown status or listed as depleted or threatened; and Fr = 1.0 for stocks thought to be at OSP.

Thus, a multi-tiered precautionary approach is incorporated into each and every PBR calculation, all reportedly for the same reason - to account for "uncertainty" which remains undefined, to ensure that marine mammal populations are at OSP levels at least 95 percent of the time. The impact of such conservative assumptions on the estimate of PBR can be significant and is elucidated in the following harbor porpoise example.

HARBOR PORPOISE PBR: A PRECAUTIONARY MANAGEMENT EXAMPLE

Harbor porpoise is a small, coastal, migratory cetacean found along the east coast from Canada to North Carolina. Harbor porpoise are currently managed in the Mid-Atlantic region under a plan developed jointly by NMFS and the Mid-Atlantic Harbor Porpoise Take Reduction (HPTRT). The final plan became effective in December, 1999. There is also a separate but closely related New England harbor porpoise management plan.

Table 1 contains harbor porpoise abundance information available during 1991 to 1997. The HPTRT had only three years of survey data (1991, 1992, 1995) available to calculate PBR in 1997. NMFS chose not to utilize the most "recent" 1995 survey of 74,000 by itself, nor did they use the moving average of the most recent three surveys, nor did they drop the oldest and therefore, most dubious survey from 1991.

Instead, NMFS reduced the population estimate to 54,300, using the inverse variance-weighted average of the three surveys. This effectively reduced the stock of harbor porpoise by 26 percent. The agency then reduced the population estimate by 8.7 percent more (taking the 20^{th} percentile of the log-normal distribution) to arrive at 48,289, the final Nmin.

This winnowing down of the population estimates represents a heavy-handed use of the precautionary approach and more importantly, a total reduction in population size equal to 34.7 percent (74,000 to 48,289) from the most recent survey count. This corresponds to a reduction in PBR from 740 to 483, significant numbers for fishermen required to meet the PBR number via the TRT process within just six months.

Table 1: Harbor Porpoise Abundance Estimates Available to the HPTRT in 1997 (data from NMFS: D. Palka, Abundance of the Gulf of Maine/Bay of Fundy Harbor Porpoise Based on Shipboard and Aerial Surveys during 1999, May 2000)

NMFS SURVEY MONTH/YEAR	"BEST" POPULATION ESTIMATE	POPULATION ADJUSTED FOR Nmin	PBR
July-August 1991	37,500	-	-
July- September 1992	67,500	-	-
July - September 1995	74,000	-	740
Arithmetic Mean of above 1991, 1992 and 1995 estimates	59,667	-	(Not used)
Inverse variance-weighted average of above 1991, 1992 and 1995 estimates	54,300	48,289	483

Finally, the application of Rmax and Fr to the reduced value for Nmin forces a further low-balling of harbor porpoise PBR estimates. This is not a valid or necessary approach for a species such as harbor porpoise. These small cetaceans are reported in the scientific literature to have extremely short life spans, early maturity and very high reproductive rates, comparing favorably with those of pinniped species (See Read, A. & A. Hohn, 1995. Life in the Fast Lane: Life History of Harbor Porpoise from the Gulf of Maine).

Arguably, applying one-half of a default Rmax value (i.e. Rmax = 0.02 ; noting that 0.04 it is the exact same value used for large, slower growing whales) and the Fr default value (0.5) for a species with such r-selected life history characteristics may be philosophically justifiable, but not necessary from a scientific standpoint. Alternatively, calculating PBR using N = 59,667; Rmax = 0.04 and Fr = 1.0, leads to an estimation of PBR for harbor porpoise equal to at least 1,629 animals.

This approach is valid when one considers that prior to implementing harbor porpoise protective measures, the NMFS 1999 population estimate for harbor porpoise totaled 89,700 animals, up from 74,000 reported in 1995 and 37,500 in 1991 (Table 1: See also Palka, D., 2000. Abundance of the Gulf of Maine/Bay of Fundy Harbor Porpoise Based on Shipboard and Aerial Surveys during 1999).

Clearly, in the process of developing the harbor porpoise plan, NMFS required an overly precautionary approach with little or no regard for the social and economic impacts of such a plan on fishermen.

In the final analysis, despite evidence of increasing population numbers prior to the implementation of a single TRT-authored management measure, protecting harbor porpoise has come totally at the expense of commercial fishermen along the east coast. Eric Anderson, a gillnet fishermen from New Hampshire recently commented on the harbor porpoise process, stating that

> It's pleasant enough to know that we avoided an ESA listing, but I'm sorry it resulted in people leaving the fishery….I wonder if society recognizes and understands what these costs are and I sometimes question if these natural resource policies are in the best interest of society. (See *National Fishermen*, September 2001)

ROBUST POPULATIONS

A direct result of the narrow-minded focus on protectionism is that the law does not contemplate the actual "management" of growing marine mammal species. This dysfunction is readily apparent along the coast of California where robust populations of marauding sea lions are presently consuming endangered runs of salmon, wreaking economic havoc in numerous fisheries, injuring humans, preventing access to private property, and fouling public breaches and marinas with fecal waste. In Maine, abundant seals are reportedly tearing into ocean net pens used to raise salmon, causing damage and product loss. Though presently confined to these two regions, increasing mammal populations may well force us to deal with this kind of problem in many other areas, including the mid-Atlantic.

Unfortunately, the law provides no management tools to treat marine mammals as we treat other mammal species that expand to the level of becoming pests. To its credit, the NMFS published a 1999 Report to Congress titled "Impacts of California Sea Lions and Pacific Harbor Seals on Salmonids and West Coast Ecosystems".

In this document NMFS reports that uncontrolled mammal populations are negatively impacting human healthy, safety, property use, recreational and commercial fishing businesses, and preventing the recovery of depressed fish populations. NMFS outlines possible methods to address the growing social and economic problems resulting from robust mammal populations and nuisance animals in their report recommendations. To date, NMFS has not seen fit to effectively implement the recommendations contained in this report.

The difficult and sensitive nature of this issue notwithstanding, the NMFS Office of Protected Resources has clearly shown it is either unwilling or incapable of handling this aspect of the management equation. Congress must now provide the leadership and direction by forcing the agency to take a responsible, practical approach to resolving the issue.

There are really just two choices to consider regarding robust species, either the Act provides for a science-based wildlife management regime which attempts population control, or it promotes efforts to develop non-lethal deterrent technology and streamlines the lethal removal process to address disruptive nuisance animals. The Act does not necessarily have to provide for both, but it must allow for management alternatives - the federal government cannot have it both ways.

ZMRG: PHILOSOPY VERUS SCIENCE

The zero mortality rate goal ("ZMRG") included in the 1994 amendments mandated reductions for incidental mammal takes to "insignificant levels approaching a zero mortality and serious injury rate."16 U.S.C. Sec. 1371(a)(2). As defined here, the Act requires that commercial fisheries attain this goal within seven years from passage of the 1994 amendments (i.e. April 2001).

Widely controversial, ZMRG is considered by some to be unattainable, and by others as a tool to stop commercial fishing. As such, it remains undefined in the regulations. However, the fact that it remains undefined does not mean it does not negatively impact fishermen during the TRT process.

Though there is no biological justification for ZMRG, there is a tacit understanding among interested parties, fostered by NMFS, that ZMRG is considered to be less than or equal to 10 percent of PBR. From our experience, the existence of ZMRG, even conceptually, is used to generate pressure for increasing restrictions on commercial fishermen during the TRT process.

Regardless of whether ZMRG is ultimately tied to some percentage of a stock's biological removal, or some other yet-to-be-determined numerical value, it remains an arbitrary limitation based solely on the fact that animals may still inadvertently be removed from a population during the process of harvesting food from the sea.

Nonetheless, it remains patently unfair to allow constituents to be pressured to achieve arbitrary, philosophical objectives as part of a federal management process.

Furthermore, the existence of ZMRG serves only as potential litigation bait - it is "Trojan Horse" in the truest sense and must be removed from the Act. The resource management process is replete with litigation and threats of litigation which impact numerous mammal stocks and fisheries.

If ZMRG is codified by regulation, the Departments of Commerce and Interior will be defenseless against near certain legal action from extremists within the conservation industry. It will be of no consequence how much fishermen have already sacrificed to achieve highly conservative PBR levels, they will be required to sacrifice even more of their ability to operate as efficient businessmen and raise their families.

THE TRT EXPERIENCE: THE GOOD, THE BAD, AND BOTTLENOSE DOLPHIN

Commercial fishermen from New Jersey and around the country were generally supportive of including the TRT component in the 1994 reauthorization. Prior to the existence of TRT's, there was no open public process to address mammal issues. Decision-making was at the discretion of the NMFS Office of Protected Resources, which was cause for concern among many resource-use constituencies.

We have openly supported those positive elements of the TRT process including the chance for free and open exchange of information, opportunities to provide experienced on-the-water observations, the ability to jointly develop gear mitigation ideas and to engage in proactive efforts to address difficult issues. For these elements of the TRT process we are thankful to Congress and the NMFS.

However, problems continue to plague the MMPA TRT process. Several of those issues were raised during this Subcommittee's last MMPA oversight hearing on April 6, 2000. These included, but were not limited to, the protocol for NMFS staff during TRT negotiations, funding problems, unreasonable deadlines, lack of sound scientific information, litigation problems, and budget shortfalls.

From a commercial fishing industry perspective, there are additional ongoing TRT problems: (1) the overwhelming lack of good scientific information; (2) poor inter- & intra-agency/departmental communication and reconciliation of fishery and mammal management plans; (3) lack of standards to require consideration of the socioeconomic impacts of proposed management measures; and (4) exposure of the Departments of Commerce and Interior to litigation or threats of litigation, forcing them to prematurely convene TRT's.

By way of example, all of the aforementioned TRT problems are strongly implicated in the brewing east

coast bottlenose dolphin management controversy. Under the current scenario, this TRT process will result in catastrophic effects on gillnet fishermen from New Jersey, Maryland, Virginia, North Carolina and potentially south to the coast of central Florida.

The bottlenose dolphin TRT process is scheduled to convene on November 6-8, 2001 with the following problems:

(1) Population estimate is severely outdated (1995) and restricted both temporally & spatially;

(2) Humane Society of the U.S. has threatened to file a "notice of intent to sue" the Secretary of Commerce for failure to convene a TRT to protect bottlenose dolphins pursuant to the MMPA;

(3) No substantive coordination exists between the NMFS Offices of Sustainable Fisheries and Protected Resources and the Atlantic States Marine Fisheries Commission to determine the impacts of State and Federal Fishery Management Plan provisions on fisheries and bottlenose dolphins;

(4) Dolphin stock was judged "depleted" due to large scale viral-related mortality event during 1987-88. Since then, no reconsideration of the "depleted" status or review of the genetic and assessment assumptions has been conducted;

(5) Before the TRT has convened the OPR staff has already suggested the TRT consider an alternative which would remove commercial gillnets within 3 km of the east coast;

(6) Efforts by commercial fishing interests to work cooperatively with the NMFS OPR to examine reflective gillnet material as a form of gear mitigation in the mid-Atlantic region remains frustrated and stalled since December 2000;

(7) Estimates of annual dolphin mortality attributed to commercial fishing are not defensible nor are they supported by the survey data;

(8) ZMRG is already influencing group discussions; and

(9) NMFS OPR has allowed the selection of a former TRT stakeholder as a facilitator who publishes a whale conservation newsletter that is funded and edited by the Massachusetts Environmental Trust and the NMFS OPR.

MMPA REAUTHORIZATION RECOMMENDATIONS

(1) Apply a set of formal standards to the decision-making process to ensure that adequate scientific information is available & utilized and that relevant social and economic factors are given due consideration

(2) Remove the Zero Mortality Rate Goal from the Act to insulate the Departments of Commerce and Interior from proactive and frivolous litigious activities

(3) Incorporate a provision into the Act which provides for effective management of robust stocks and nuisance animals through the development of non-lethal deterrent devices

(4) Provide specific guidance and increased authorization for cooperative research funding to encourage the development and testing of gear mitigation alternatives

(5) Direct the Ocean Studies Board of the National Academy of Sciences to provide Congress with an independent, objective assessment of all MMPA goals, including how the Act is currently implemented "commensurate with sound policies of wildlife management", the realities of achieving OSP at least 95% of the time for all stocks, the necessity of such a conservative approach as it relates to ensuring that mammals remain "a significant functioning element of the ecosystem", and finally, an estimate of the cost this Act is having on our nation's commerce

(6) Redefine, clarify, and provide specific guidance for each element of the PBR calculation to minimize repetitive layering of overly precautionary decision-making; direct NMFS to provide the TRT with a full range of possible PBR values, rather than a single conservative point estimate; and require NMFS to take an inter-disciplinary, coordinated approach to mammal management using all available resources in different departments, the regional management councils and state commissions, rather than relying solely on OPR

(7) Amend the Act to include a provision which allows for TRT's to convene proactively for purposes of identifying scientific data gaps, research and observer needs, and gear mitigation proposals while being held harmless under 16 U.S.C.1387(6)(f)(2) which triggers a 6-month requirement for the TRT, once convened, to achieve PBR

(8) Incorporate objective selection criteria into the Act which ensures that TRT facilitators have no previous history of stakeholder participation in marine mammal issues

(9) Provide the appropriate authorization levels for NMFS to conduct necessary research and stock assessment work

(10) Change the name of the Act to the "Marine Mammal Management and Conservation Act" to reflect the commitment of Congress to achieve a more balanced law

Mr. Chairman, I ask that you kindly accept my written testimony for the record, and on behalf of the GSSA and like-minded commercial fishermen from around the nation, I thank you for the opportunity to share our concerns and ideas with your Subcommittee.